

Notice of Allowability

Application No.

10/840,130

Examiner

Charlie Peng

Applicant(s)

HOMA, DANIEL SCOTT

Art Unit

2883

~ The MAILING DATE of this communication appears on the cover sheet with the correspondence address~

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 14 March 2005.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ The drawings filed on 29 November 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 20050329
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Brian Healy
Primary Examiner

DETAILED ACTION

Allowable Subject Matter

Claims 1-9 are allowed. The following is a statement of reasons for the indication of allowable subject matter.

Claim 1 discloses a single mode optical fiber for a long wavelength signal transmission having a pure silica core having a diameter d and a surrounding fluorine-doped cladding having a diameter D , wherein the ratio of diameters D/d is approximately 8.5. U.S. Patent Tsukitani et al. teaches an optical fiber of single mode transmission at a wavelength of $1.55\text{ }\mu\text{m}$ with a pure silica core and F-doped cladding. Tsukitani further teaches that the core diameter **2a** is up to $5.67\text{ }\mu\text{m}$ while the fiber diameter **DA1** is $115\text{ }\mu\text{m}$ or more. This gives a ratio of diameters much larger than that claimed by the applicant. Further, there is no obvious motivation for combining other prior art having such a ratio to formulate a 35 U.S.C. § 103 rejection. It is the Examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious all the limitations of claim 1.

Claim 5 discloses a method of forming the single mode optical fiber as disclosed in claim 1 using a preform made by the steps of providing a glass tube, depositing a plurality of layers of F-doped silica on the inner wall of the glass tube, subsequently depositing silica materials on the inner wall of the glass tube, and collapsing the tube to form an optical fiber preform. U.S. PGPub 2005/0063663 to Anderson et al. in view of Tsukitani et al. teach all the limitations including creating a soot tube, depositing and

doping silica layers inside the soot tube, and collapsing the soot tube to form an optical fiber preform. Similar to claim 1, Anderson and Tsukitani do not teach the ratio of the diameters to be approximately 8.5, and there is no obvious motivation for combining other prior art having such a ratio. It is the Examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious all the limitations of claim 5.

Claims 2-4 and 6-9 are allowed by virtue of being dependent upon allowed claims 1 and 5.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 8:30 am - 5 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Brian Healy
Primary Examiner